

## WHAT IS CLAIMED IS :

1. A carbohydrate peptide conjugate comprising :  
a carrier comprising a dendrimeric poly-Lysine enabling multiple epitopes to be covalently attached thereto  
at least one ~~structurally defined~~ peptide comprising one T epitope or several identical or different T epitopes,  
at least one ~~structurally defined~~ carbohydrate moiety, or a derivative thereof, containing B epitope, provided it is not a sialoside, or several identical or different ~~B~~ epitopes.
2. A conjugate according to claim 1 wherein said dendrimeric poly-Lysine forms a 4 branches star, with an epitope T covalently bound to each lysine of the branches of said carrier.
3. A conjugate according to claim 1 or 2 which comprises at least 3 lysines and up to 15 lysines covalently linked to one another.
4. A conjugate according to ~~any one of claims 1 to 3~~ <sup>claim 1</sup> wherein to the NH<sub>2</sub> end of at least two lysine residues is bound at least one peptide comprising one epitope T and wherein the carbohydrate moiety is covalently bound to the end of said peptide opposite to the lysine.
5. A conjugate according to ~~any one of claims 1 to 3~~ <sup>claim 1</sup> wherein to the NH<sub>2</sub> end of at least two lysine residues is bound at least one carbohydrate residue being not a sialoside, optionally substituted and ~~forming a B epitope~~ <sup>containing</sup> a B epitope and wherein the peptide comprising one T epitope is covalently bound to the end of said carbohydrate.
6. A conjugate according to ~~any one of claims 1 to 5~~ <sup>claim 1</sup> wherein the carbohydrate moiety is galactosyl.
7. A conjugate according to ~~any one of claims 1 to 4~~ <sup>claim 1</sup> which comprises 3 lysine residues, at least 4 <sup>T cell</sup> epitopes ~~of the T type~~, which may be the same or different, linked to the NH<sub>2</sub> ends of 2 of the lysine residues and 4  $\alpha$ -galactosyl-Nacetyl-Serine residues.
8. A conjugate according to ~~claims 1 to 7~~ <sup>claim 1</sup> wherein the carbohydrate moiety is a galactosyl residue and is substituted by another glycosyl residue.

claim 1  
9. A conjugate according to ~~claims 1 to 8~~ wherein the carbohydrate is a tumor antigen.

claim 1  
10. A conjugate according to ~~claims 1 to 9~~ wherein the epitope T is the 103-115 peptide of the VP1 protein of poliovirus type 1.

claim 1  
11. A conjugate according to ~~claims 1 to 10~~ wherein the carbohydrate is grafted in combination with a tumor peptidic CD8<sup>+</sup> T cell epitope.

claim 1  
12. A conjugate according to ~~claims 1 to 8 or 11~~ wherein the carbohydrate is of bacterial or fungal origin.

13. A conjugate according to claim 12 wherein the carbohydrate is from capsular bacterial polysaccharides selected from the group consisting of *Neisseria meningitis*, *Haemophilus influenza*, *Streptococcus pneumonia* and other *Streptococcus* species, with the exception of sialylated polysaccharides.

14. A conjugate according to claim 1 wherein the carbohydrate is selected from the group consisting of Tn antigen di-Tn antigen, tri-Tn antigen, T<sup>+</sup> antigen and hexa-Tn antigen.

15. A carbohydrate peptide conjugate comprising :

at least one peptide comprising one T epitope, or several identical or different T epitopes, and

at least one carbohydrate moiety, or a derivative thereof, containing B epitope, provided it is not sialoside, or several identical or different epitopes.

16. A carbohydrate peptide conjugate according to claim 15 wherein the carbohydrate moiety is selected from the group consisting of Tn antigen, di-Tn antigen, Tri-Tn antigen, hexa-Tn antigen and T<sup>+</sup> antigen.

claim 1  
17. Pharmaceutical composition comprising the conjugate according to ~~any~~ ~~one of claims 1 to 16~~ and a suitable carrier and adjuvant.

18. Vaccine comprising the conjugate according to ~~any one of claims 1 to 16~~.

claim 1  
19. Immunogenic composition comprising at least one carbohydrate peptide conjugate according to ~~claims 1 to 16~~ capable to elect an immune response against a viral infection caused by a pathogen such as ~~hepatitis virus, HIV or CMV~~.

25 into contact with at least one antibody according to claim 26 and wherein one determines the formation of complexes between this antibody and molecules comprised in the said sample

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